

PROJECT 10073 RECORD

1. DATE - TIME GROUP 14 Feb 67 15/0246Z	2. LOCATION Morgantown, Pennsylvania one
3. SOURCE Civilian	10. CONCLUSION Aircraft (possible) <u>29</u> ✓
4. NUMBER OF OBJECTS One	
5. LENGTH OF OBSERVATION 8 minutes	11. BRIEF SUMMARY AND ANALYSIS
6. TYPE OF OBSERVATION Ground Visual	Observer watched at first an orange fireball then a more observable object coming from the east. The fireball type of object changed to one with a three light configuration. There was one white, another green and the third red. The observer made several calculations to determine the height and speed of the object.
7. COURSE westward	
8. PHOTOS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The description is consistent with that of an aircraft observation.
9. PHYSICAL EVIDENCE <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

14 Feb 67

Morgantown, Pa.

10 March 1967


P.O. Box

Dear Sir:

Thank you for your report, which Lt. Marley has forwarded to me for comment. Your calculations appear correct in principle, but the speed could have been calculated using the hypotenuse of the right triangle, since the sound would be travelling along the hypotenuse when the object was closest. The calculation done in that way gives 420 Mph.

The only part of the sighting which does not fit the description of a jet airplane is the very bright light, which is not ordinarily seen on cruising jets.

I say ordinarily. Actually the height you calculated would indicate a jet still climbing out of airport toward cruising altitude (over 18,000 ft. usually). It is common for aircraft climbing through approach routes to turn on their landing lights as a warning to possible incoming aircraft. These landing lights are powerful and are concentrated forward in a moderately wide beam.

I have done some calculations on the brightness of these lights at various distances, and found, for example, that a 1000 candlepower light confined to a 30-degree beam will appear of magnitude - 6 to an observer ten miles away - a little over 10 times as bright as Venus is right now. It would have the same brilliance as Venus about 30 miles away. Thus the bright light does not strike me as unusual.

10 March 1967

The remaining configurations and colors of lights you describe sound to me like a competent description of the normal running lights of a jet aircraft, seen from various angles as the plane passes by. Not knowing the airline schedules, I cannot of course make a positive identification, but in comparison with the really unusual UFO sightings competing for our time, this one does not seem to call for further investigation.

Yours truly,

[REDACTED]

WTP:lh

send copy to how

Morgantown, Penna.
February 15th, 1967

To: Project Blue Book,
Wright Patterson Air Force Base,
Dayton, Ohio.

Subject: UFO Report

Time: 9:46PM to 9:54 PM; February 14th, 1967.

Location: south of Morgantown, Penna.

Direction of Travel: East to West.

Description: at first, an orange fireball; then changing to a three light formation (triangle..one white, another green, another ruby red)..and then, after 5 seconds more....an appearance of a "U" shaped crescent of ruby red non-blinking-continuous lights.

My calculations concerning other factors pertaining to the size, speed, and altitude of this object:

Diameter: 258 feet

Speed: 530 mile/hr.....7800 ft/sec.

Viewed at 45 degrees above the horizon.

Real distance from observer.....17,680 ft. 3.3 mile.

Real altitude above the ground.....12,629 ft. 2.4 mile.

Sound lag: 18 inches behind object at 24 inches.

Sound description: no sound until it passed about 15 degrees beyond the observer; then, a loud motor sound like a 4 motored propeller type airplane.

- Report on observation:

I live in a mobile home and late in the evening I usually take a walk on the darkened road to smoke a cigarette. This prevents the trailer from getting smelled up since it is closed up at this time of the evening. At the evening of the sighting, I walked down the road looking up at the stars. I would like to point out that here we have a good location with "good seeing" for observing the stars. There are few street lights here, and the surrounding towns are 10 to 15 mile away...and the glow from nearby towns does not interfere very much with the sky here. Visual observations even rather close to the horizon are good.

I do know that stars lower than 10 degrees above the horizon are usually obscured due to the added atmosphere that the light has to pass through, and ground light glow, and cloud obscuring etc. I noticed an unusual light to my south east which looked like a planet (about as bright as Jupiter is when overhead) but about 2 or 3 degrees above "Welsh Mountain", which is to my south. This was immediately noticeable....and I stood along the road where an apple tree was between me and the sky: in that way I could notice motion in relation to the tree branches. After a few seconds, I noticed that it looked like a fire-ball and was a bright yellow color...and that the path of travel would have it travel parallel to the road and at an altitude of 45 degrees to me. I was planning to ignore reporting this....since my last report to your office was not acknowledged....but I thought I had better get my wife immediately to take a look at this, just in case.

(Later I measured the distance from where I was standing, by the apple tree, to the door of my trailer)

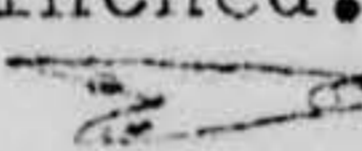
I ran as fast as I could, running 100 yards back to the trailer, opened the door and called my wife out....just in time to see a fireball, apparent size, the size of a pencil eraser held at arms distance, ($\frac{1}{4}$ in at 24 in)...and directly to my south....and I noted the position in relation to a powerline pole and wires along the road.

It took 17 seconds for me to run the 100 yards, and get my wife outside to see the fire-ball. At this time it changed to an orange color; the same color and brightness as an oil burner flame...a dull orange.

I was suddenly aware that I wasn't taking pertinent information for later calculations; so I immediately got the apparent diameter. Then the motor sound was heard. My wife said " that's not an airplane".....

I noticed that the sound lag between the fireball and its sound source was very directional and, using two hand spans with my thumbs together, I noted that the sound lag was 18 inches...and my arm length is 24 inches. I checked this three times for accuracy.

I noted the time; 9:50...when the object was directly south...I noted that its path was 45 degrees; exactly half way between my zenith and the ground.

After the fireball passed and was south west of me, it suddenly changed to a 3 light formation; in a triangle, the left light was green, the forward one white, and the right one red;....and for five seconds this pattern prevailed. I got the apparent diameter of the light formation: $\frac{1}{4}$ in at 24 inches. It looked like a swept wing airplane and gave the impression of  but offered no outline and really looked like this: "...".

After the five seconds when it was traveling more West than South, it formed a "U" shaped crescent, resembling a "saucer shape", but no blinking light in the center. I watched it for another 3 minutes, checked its apparent size all the time:....and just before it entered a cloud cover (and the clouds were high and to the west: for the most part a clear sky with good seeing). I got an apparent diameter of the width of a nickle. Then it entered the cloud cover and was obscured.

Here is what it looked like: "...".

Being along the turn Pike we have a lot of air traffic over Morgantown and this object was in the flight lane between Philadelphia and Harrisburg; but it definitely was not an airplane....unless one had a terrific fire that burned for 8 minutes before being extinguished. It did have the airplane sound, but this was not heard until after it had passed by no sonic boom etc. no outline.

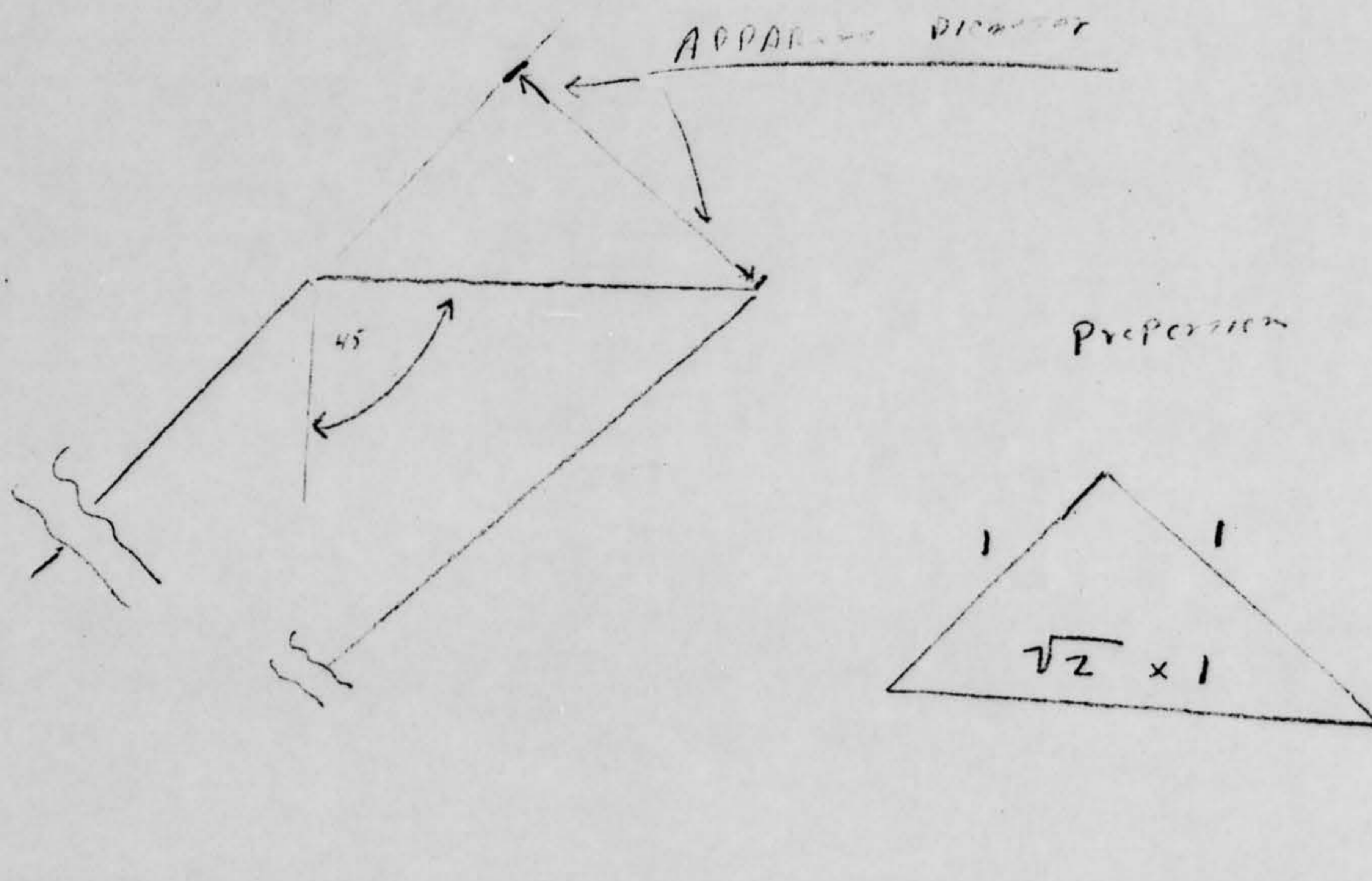
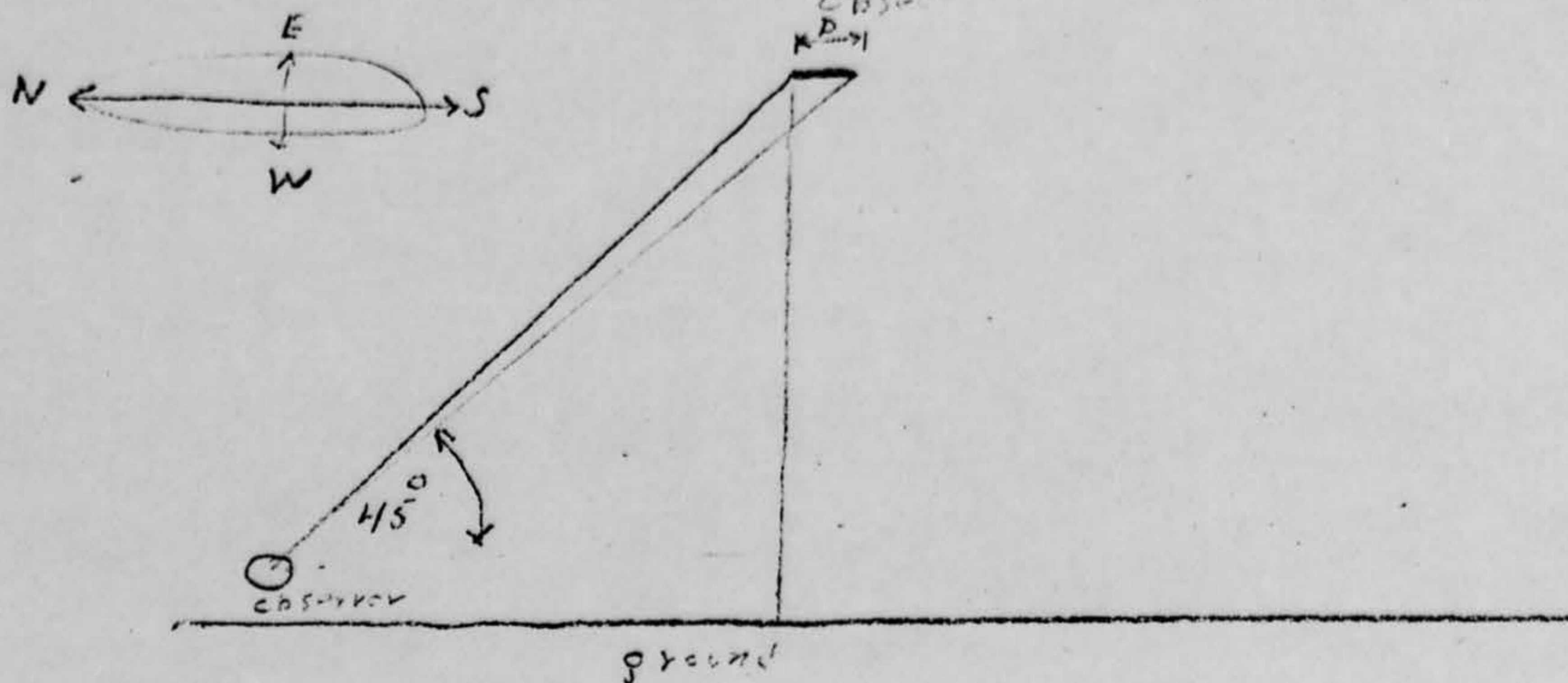
My Calculations:

Knowing that the sound lag is 16 inches in 24 inches; then the ratio of 16/24 times 1040 ft/sec (the speed of sound at 40 degrees) yields the air speed of the object. This calculation is 780 ft/sec.

Since 88 ft/sec equals 60 mi/hr; then 1.47 ft/sec equals 1 mile/hr.

780/1.47 equals 530 miles/hr.

Size: since the observed diameter of $\frac{1}{4}$ inch at 24 inches, was made at a 45 degree angle: by multiplying by 1.4 (the square root of 2) I have corrected to .350 in...which is the apparent diameter of an observer directly underneath it. With a 45 degree angle....the sides are 1:1: and $\sqrt{2}$; consequently this correction is necessary in calculation of the real diameter of the object.



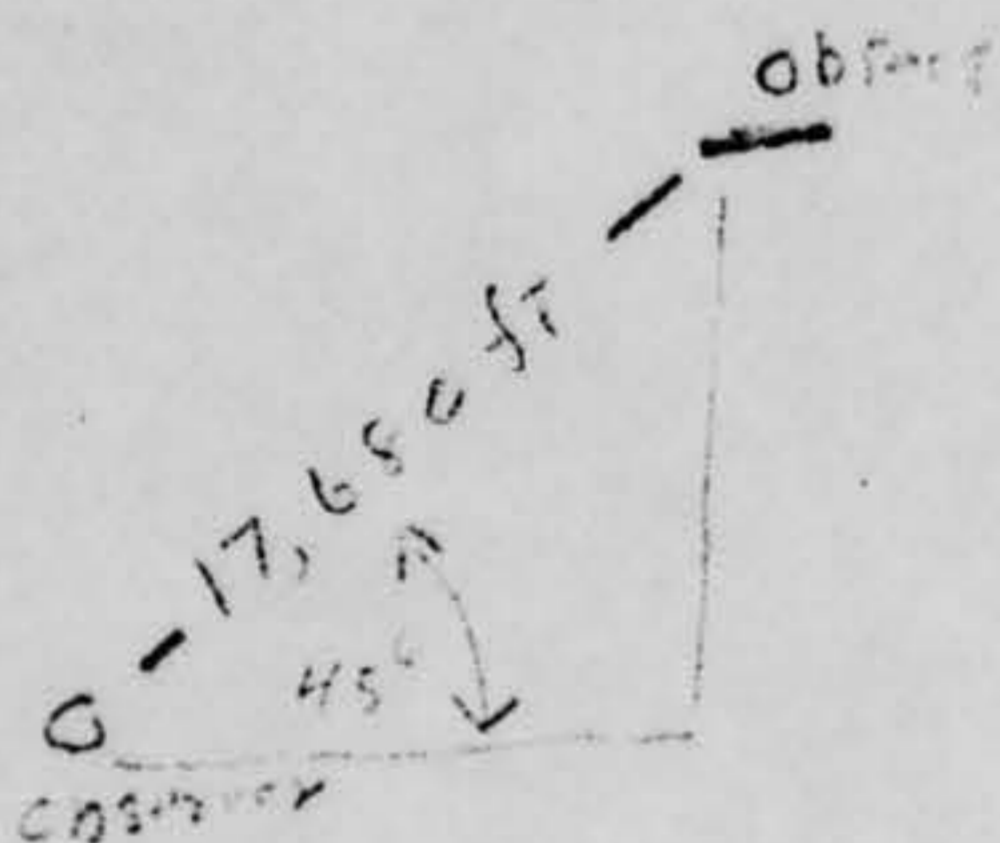
Note: the apparent diameter is really the hypotenuse of a right triangle; and since this one is a 45 degree one, the correction merely requires multiplying the apparent diameter by the square root of two; which is 1.4 : and the real apparent diameter is .350 inches at 24 inches. This will be used to calculate the real diameter now.

If the sound lag is 18 inches at a distance of 24 inches: then the ratio times the speed of sound will give the real speed of the object. $18/24 \dots$ or $3/4$ times 1040 gives a speed of 780 ft/sec...or 530 mi/hr. Since the corrected apparent diameter is .350; then 18 in/.350 yeilds 51.4 diameters per 17 seconds.

Since the 18 inches were traversed in 17 seconds; then $51.4/17$ gives 3.02 diameters/sec.and the calculated speed is 780 ft/sec: then $780/3.02$ will give the real calculated diameter; which is 258 ft.

If an object is traveling at the speed of sound; then the sound lag will be a 45 degree angle, and at an arms length of 24 inches, the object would have to also have a sound lage of 24 inches to travel at the same speed as sound. The ratio provides the ratio of speed as compared to the speed of sound; and if the time needed to travel an equal distance is determined (timed) then the real speed can be determined as I have just done.

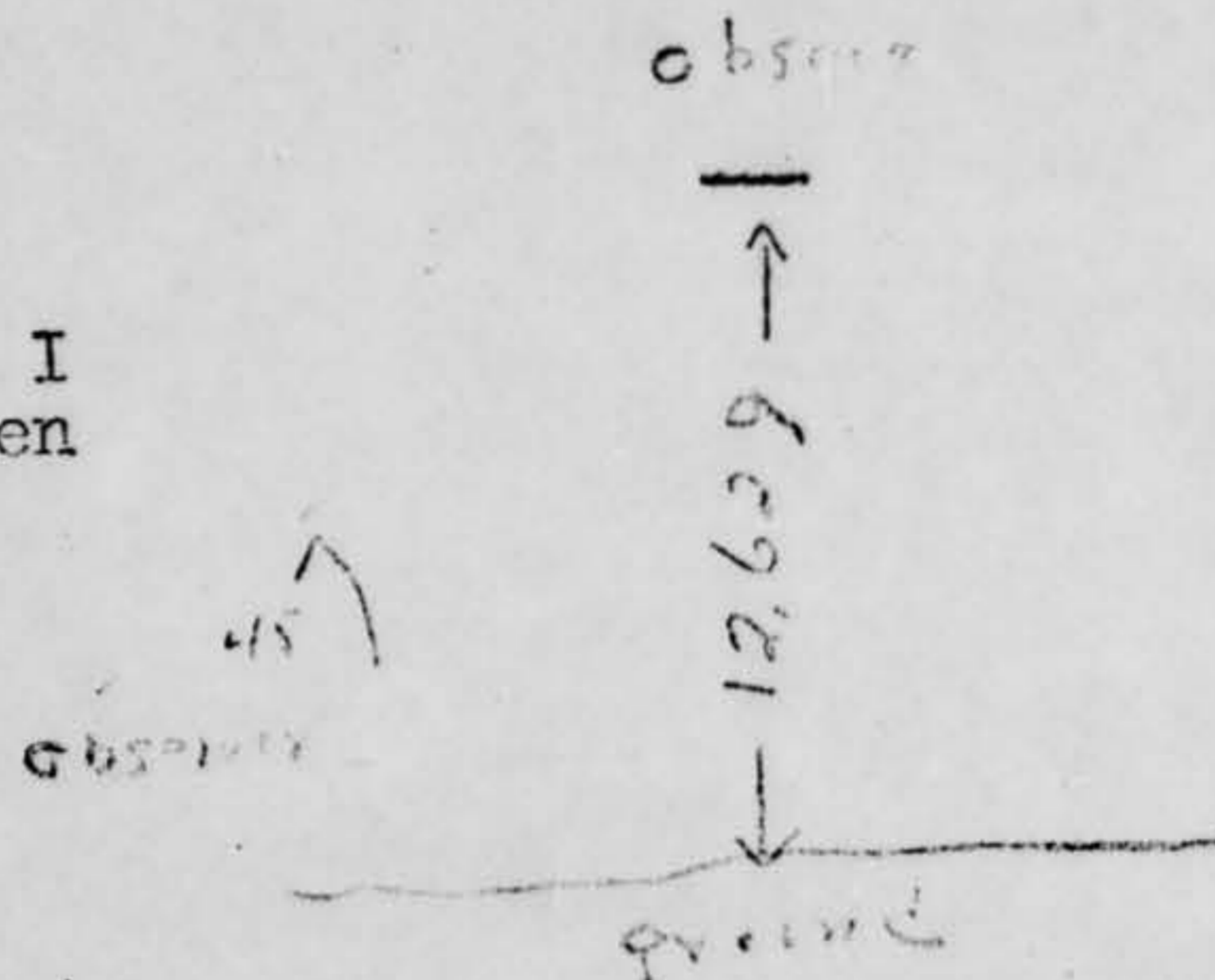
Next: the same amount of time is needed for the sound to travel to the observer as it takes for the object to travel a length equal to the sound lag. Since this was 17 seconds for this sighting: then 17×1040 will give the feet away from the observer. This is 17,680 ft....which is the hypotenuse of a right triangle and not the true altitude above the ground.



By dividing by 1.4 (the $\sqrt{2}$) we can calculate the actual altitude above the ground directly underneath the object.

$17,680/1.4$ equals 12,629 ft.

As a result of these calculations, I have determined that the object, when it was directly south of me, was 258 ft. in diameter....at a real altitude of 12,629 ft....and was traveling at a uniform speed of 530 miles/hr.



End of report: sincerely Yours:

Morgantown, Penna

